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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,204	09/12/2003	Jason C. Lail	C0025A	7216
21495	7590	01/27/2005	EXAMINER	
CORNING CABLE SYSTEMS LLC			HYEON, HAE M	
P O BOX 489			ART UNIT	PAPER NUMBER
HICKORY, NC 28603			2839	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,204

Applicant(s)

LAIL ET AL.

Examiner

Hae M Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) 6,15-17,27,36-38,50,51,54,55 and 58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-14,18-26,28-35,39-49,52,53,56,57,59 and 60-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/24/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claim 1 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed 12-19-02. In that paper, applicant has stated a polyester binder thread 17 holds dry insert 14 about optical waveguide 12, and this statement indicates that the invention is different from what is defined in the claim(s) because the binder thread 17 is placed in between the interior surface of the tube and the dry insert 14. Therefore, the binder thread 17 is disposed adjacent to the interior surface of the tube and not the dry insert 14.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7-14, 18-26, 28-35, 39-49, 52, 53, 56, 57, 59 and 60-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurley (6,389,204 B1) in view of Bringuier (6,122,424), Anderson et al (6,377,738 B1) and Fujiura et al (5,838,863).

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Hurley discloses an optical tube assembly 20 comprising a tube 28, at least one optical waveguide 24 disposed in the tube 28, and at least one dry insert 26 disposed adjacent to the interior surface of the tube 28. In the Abstract, Hurley clearly teaches that the optical tube assembly includes attenuation of about 0.3 dB or less and a peak cable core pull-out force of about 1 Newton or less. However, Hurley does not disclose the dry layer having two layers wherein one layer being a compressible layer and the other layer being water-swellaable tape or foam layer.

Bringuier discloses an optical tube assembly comprising a tube 15, at least one optical waveguide 12 disposed in the tube 15, and at least one dry insert having two layers 20, 30 surrounding the optical waveguide 12. The layer 20 of the dry insert includes a conventional super absorbent material 31 to provide water-swellaable layer. The layer 30 is a compressible layer formed from polyurethane spunbonded fabric, which includes a porous web structure of non-woven fibers with interstices comprising air cells or pockets.

Anderson discloses an optical fiber cable 10 comprising a water-swellaable layer 32 in a form of a tape to protect the cable 10 from moisture. Fujiura discloses an optical cable having polyurethane foam layer 1 surrounding optical waveguide, which also includes water absorbent material to block moisture from entering into the cable. Also, water-swellaable tape and foam layer are commonly known in the art of an optical fiber cable.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the optical tube assembly taught by Hurley such that it would have a dry layer having at least two water-swellaable tape or foam layers as taught by Bringuier, Anderson and Fujiura to protect the optical tube from moisture.

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Regarding to different materials for elements of the optical tube assembly, it only deals with the use of preferred material. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

5. Applicant's arguments with respect to claims 1-5, 7-14, 18-26, 28-35, 39-49, 52, 53, 56, 57, 59 and 60-62 have been considered but are moot in view of the new ground(s) of rejection.

The applicant argues that it is not proper to combine the reference by Bringuier (6,122,424) with the reference by Anderson (6,377,738) because Bringuier already disclosed a water-swellaable layer. The examiner was simply trying to show that the water-swellaable layer of Bringuier could be replaced with the water-swellaable tape layer of Anderson. While Bringuier teaches a water-swellaable layer, Bringuier does not disclose the water-swellaable layer to be a tape layer. However, Anderson discloses a water-swellaable layer being in a tape form. Therefore, replacing the water-swellaable layer of Bringuier with the water-swellaable tape layer of Anderson only deals with replacing one form of layer with another form of layer, while both layers having the same function. Also, the examiner added the reference by Fujiura (5,838,863) simply to show that the water-swellaable layer also comes in form of a polyurethane foam layer.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 5,621,842 by Keller and US Patent No. 6,278,826 B1 by Sheu.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hae M Hyeon
Primary Examiner
Art Unit 2839

hnh

hnh

Hae Moon Hyeon